

**IN THE CLAIMS:**

Please amend the claims as follows:

1. (Currently Amended) An apparatus configured for automatic instantiation of templates, comprising:
  - a processor;
  - memory in communication with the processor;
  - a first operating system configured for use residing in the memory and executable by the processor and the memory, and;
  - a set of source code modules; and
  - at least one computer program configured for use with the processor and the memory, the at least one computer program comprising a template instantiation portion configured to provide generate template source code for each occurrence of a template appearing in the set of source code modules, and a cross compiler portion configured to generate template object code from the template source code, the template object code configured for use on a second operating system different from the first operating system.
2. (Original) The apparatus of claim 1, wherein the cross compiler portion is a separate computer program from the template instantiation portion.
3. (Original) The apparatus of claim 1, wherein the first operating system is selected from OS/2, Linux, Unix, Solaris, Java Virtual Machine, Windows2000, Windows NT, Windows95, and Windows98.
4. (Currently Amended) The apparatus of claim 1, wherein the cross compiler is configured to compile a programming language selected from Pascal, Cobol, FORTRAN, Ada, Java, [[C.]] C+, and C++.
5. (Currently Amended) A method for automatic instantiation of templates for a cross compiler, comprising:
  - providing source code;

extracting template information from the source code;  
providing the template information to a template repository;  
generating template source code in response to information from the template  
information; and  
using the cross compiler to generate first template object code from the  
corresponding to the template source code; and  
wherein the first template object code is operable on a target computer system  
having a linker.

6. (Original) The method of claim 5, further comprising:  
amending the template source code in response to template dependency on  
another template; and  
generating a list of the template source code as amended.
7. (Currently Amended) The method of claim 6, further comprising:  
using the cross compiler to generate second template object code by compiling  
the template source code as amended, ~~into second template object code~~.
8. (Original) The method of claim 7, wherein the amending of the template source  
code comprises identifying at least one addition or change to the template source code  
within the template repository.
9. (Currently Amended) The method of claim 8, further comprising linking the  
second template object code and other object code using with using the linker on the  
target system to provide machine executable code operable on the target computer  
system.
10. (Currently Amended) A method for automatic instantiation of templates from  
source code for use with a cross compiler residing on an origination computer system,  
comprising:  
providing a template repository in communication with the cross compiler;  
providing source code modules;

generating at least one template information file from the source code modules using the cross compiler;

providing the at least one template information file to the template repository;

generating at least one template source code module in response to from the at least one template information file; and

generating object code using the cross compiler modules from the source code modules and the at least one template source code file module using the cross compiler;

wherein the object code is intended for linking linkable on a target computer system having a operating system different in kind than that of the origination computer system.

11. (Currently Amended) The method of claim 10, further comprising amending the source code modules with the at least one template source code file module associated with the at least one template information file module.

12. (Currently Amended) The method of claim 11, further comprising providing the object code modules to the target computing system, wherein the target computer system includes a linker configured to link the object code modules.

13. (Currently Amended) The method of claim 12, wherein the linker is not configured to instantiate a template.

13 26. (Renumbered by Examiner, Currently Amended) The method of claim 12, further comprising:

generating a template information file list associated with the at least one template information file; and

generating a list of the at least one template source code file module.

14. (Currently Amended) The method of claim 13, further comprising generating at least one more template information file corresponding to the template source code file module.

15. (Original) The method of claim 14, further comprising generating another template information file list associated with both the at least one template information file and the at least one more template information file.

16. (Currently Amended) A system for cross compilation with automatic template instantiation, comprising:

a first computer programmed under control of a first operating system, the first computer comprising:

source code modules;

a cross compiler configured to generate object code modules and template information files from the source code modules;

a template repository configured to receive the template information files; and

a program configured to;

generate a list of the template information files, template source code file modules, and a list of template source code files modules, and further the program configured to locate the list of the template information files, the template source code files and the list of template source code files in the temporary repository, the program configured to employ the cross compiler to generate template object code file modules from the template source code file modules.

17. (Currently Amended) The system of claim 16 further comprising:

a second computer programmed with a second operating system different in kind from the first operating system, the second computer in communication with the first computer to receive the template object code file modules.

18. (Currently Amended) The system of claim 17, wherein the template object code file modules are provided to the second computer using a machine-readable signal bearing medium.

19. (Original) The system of claim 18, wherein the machine-readable signal bearing medium is a transmission medium.

20. (Original) The system of claim 18, wherein the machine-readable signal bearing medium is a storage medium.

21. (Original) A signal-bearing medium containing a program which, when executed by a processor in response to receiving template information, causes execution of a method comprising:

generating template source code in response to the template information; and  
invoking a cross compiler to generate first template object code corresponding to the template source code;

wherein the first template object code is linkable on a target computer system having a linker without template instantiation support.

22. (Original) The signal-bearing medium of claim 21, further comprising:

amending the template source code in response to template dependency on another template; and

generating a list of the template source code as amended.

23. (Original) The signal-bearing medium of claim 22, further comprising:

compiling the template source code as amended into second template object code.

24. (Original) The signal-bearing medium of claim 23, wherein the amending of the template source code comprises identifying at least one addition or change to the template source code within the template repository.

25. (Original) The signal-bearing medium of claim 24, further comprising linking the second template object code with the linker to provide machine executable code operable on the target computer system.